

# ELECTRONIC MATCHING ENGINE FOR MATCHING DESIRED CHARACTERISTICS WITH ITEM ATTRIBUTES

## ABSTRACT OF THE DISCLOSURE

A digital system for matching desired characteristics with item attributes. The system provides for weighting of variable values to be matched, and substitution of variables or values. Both discrete and continuous weighting can be used. This approach provides for more flexible matching to yield practical and useful results without placing high requirements on the computer system. Weights can be assigned to variable values as defaults. Such assignment is usually performed by a system administrator, or the assignment can be calculated by a process in the matching engine (e.g., as a discrete or continuous function) or otherwise automatically derived. Weights can be selected by users (both buyers and sellers) by using a user interface that translates common expressions (e.g., “not required,” “desired,” “required”) into weighting values between 0 and 1. Alternatively, users can assign weights as a number, or by other means. One feature of a preferred embodiment of the invention allows preferences (i.e., characteristics and attributes) to be matched with regard to two different sides of a transaction. For example, both buyer and seller preferences can be taken into account in creating a match. This allows sellers to eliminate items or services from a particular transaction based on seller goals of profitability, or where it makes a difference as to who the buyer is, or what is being offered in exchange for an item or service for sale. For example, in a job market system, the “seller” is an employer who may require prospective candidates to have a minimum number of years of education.